TENNESSEE AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243-1531

Permit to Construct or Modify an Air Contaminant Source Issued Pursuant to Tennessee Air Quality Act

Date Issued: MONTH DAY, 2005

Permit Number: 958558P

Date Expires: October 31, 2007

Issued To:
Tate & Lyle Ingredients America, Inc.

Installation Address:
198 Blair Bend Drive
Loudon, Tenn.

Installation Description:
Corn Meal Processing

Emission Source Reference No.
53-0081

Wetmill / Feedhouse Area
03 - Steephouse & Millhouse Aspiration
16 - Gluten Filter Aspiration
06 - Cracked Corn Conveying
07 - Germ Dryers No. 1 & 2
10 - Pellet Cooler #1
11 - Pellet Cooler #2
12 - Pellet Cooler #3
13 - Pellet Cooler #4
14 - Germ Dryer Collector
17 - Gluten Conveying and Gluten Meal Loadout
64 - Germ Dewatering

Elevator Area
01 - Corn Unloading Dust Collector
02 - Elevator Dust /Collector

Alcohol Area
28 - CO2 and Propogator Scrubber
54 – Two Denatured Alcohol Tanks
55 – Alcohol Storage and Loadout
59 - Gasoline Storage Tank
97 - Alcohol Storage Tank #2
98 - Alcohol Storage Tank #1
99 – Alcohol Barge Loadout Facility

Utilities Area
34 - Coal Fired Boilers and oil/gas boiler

Wastewater Treatment Area
15 – Anaerobic Flare

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

CONDITIONS BEGIN ON NEXT PAGE

DRAFT PERMIT

TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE **POST AT INSTALLATION ADDRESS**

Conditions 2 through 12 apply to all sources in this permit unless otherwise noted.

1. The application that was utilized in the preparation of this permit is dated October 3, 2005, and signed by Michael J. Slimbarski, Plant Manager for the permitted facility. If this person terminates employment or is reassigned different duties such that they are no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

2. The maximum input capacity for these sources shall not exceed the amount as given in the approved confidential application dated October 3, 2005.

3. The permittee must submit a Title V operating permit application within three hundred sixty five (365) days of initial start-up for these sources.

4. Sources No. 28, 59, 97, 98 and 99 may be subject to the requirements of the National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing, 40 CFR 63 Subpart FFFF and/or to the New Source Performance Standards (NSPS): Standards of Performance for Equipment leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, 40 CFR 60 Subpart VV.

5. Visible emissions from these sources shall not exhibit greater than twenty percent (20%) opacity as determined by EPA Method 9, as published in the Federal Register, Volume 39, Number 219 on November 12, 1974. (six-minute average)

   Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996.

6. Routine maintenance, as required to maintain specified emission limits, shall be performed on the air pollution control device(s). Maintenance records shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than five years.

7. The permittee shall certify the start-up date of the air contaminant source regulated by this permit by submitting

   A COPY OF ALL PAGES OF THIS PERMIT,

   with the information required in A) and B) of this condition completed, to the Technical Secretary's representatives listed below:

   DATE OF START-UP: _____ / ____ / _____
   month day year

   Anticipated operating rate: ____ percent of maximum rated capacity

   For the purpose of complying with this condition, "start-up" of the air contaminant source shall be the date of the setting in operation of the modification or additions to the facility as described in this permit for the production of product for sale or use as raw materials or steam or heat production.

The undersigned represents that he/she has the full authority to represent and bind the permittee in environmental permitting affairs. The undersigned further represents that the above provided information is true to the best of his/her knowledge and belief.

Signature		Date
Signer's name (type or print)	Title	Phone (with area code)

Note: This certification is not an application for an operating permit. At a minimum, the appropriate application form(s) must be submitted requesting an operating permit. The application must be submitted in accordance with the requirements of this permit.

The completed certification shall be delivered to the Compliance Validation Program and the Environmental Assistance Center at the addresses listed below, no later than thirty (30) days after the air contaminant source is started-up.

Compliance Validation Program
Division of Air Pollution Control
9th Floor, L & C Annex
401 Church Street
Nashville, TN 37243-1531

Knoxville Environmental Assistance Center
Division of Air Pollution Control
2700 Middlebrook Pike
Knoxville, TN 37921

8. This permit shall serve as a temporary operating permit from initial start-up to the receipt of a standard operating permit, provided the operating permit is applied for within the time period specified in Condition 3 of this permit and all applicable emission standards are met.

WET MILL/FEEDHOUSE AREA

53-0081-03	Steep House and Mill House Aspiration Packed Bed Scrubber Control which exhausts through the Mill House Stack

9. The maximum input capacity for this source shall not exceed the amount as given in the approved confidential application dated October 3, 2005.

   Compliance Method: A log of the process material input rate in a form that assures compliance with this condition must be maintained at the source location and made available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

   See Condition E4-1 of Major Source Operating Permit No. 548512.

10. Sulfur dioxide emissions from this source shall be emitted through the Mill House Stack and shall not exceed 15.34 pounds per hour.

    Volatile organic compound emissions from this source shall be emitted through the Mill House Stack and shall not exceed 28.5 tons per year.

    Compliance Method: Compliance with the VOC and SO2 emissions shall be assured by maintaining the parameters specified in the Manufacturing Process Parameter Table at Condition #19.

    See Condition E4-2 of Major Source Operating Permit No. 548512.

53-0081-16 Application – 05, 20 and 65	Gluten Filter Aspiration with wet scrubber control Feed Cooler w/cyclone control Vacuum Filter Aspiriation

11. The maximum input capacity for Gluten Filter Aspiration shall not exceed the amount as given in the approved confidential application dated October 3, 2005.

    Compliance Method: A log of the process material input rate in a form that assures compliance with this condition must be maintained at the source location and made available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

    See Condition E7-1 (a) of Major Source Operating Permit No. 548512.

12. Volatile Organic Compound emissions from Gluten Filter Aspiration shall not exceed 10.5 tons/year.

    Sulfur dioxide emissions from Gluten Filter Aspiration shall not exceed 4.6 tons/year.

    Compliance Method: Compliance with the VOC and SO2 emissions shall be assured by maintaining the parameters specified in the Manufacturing Process Parameter Table at Condition #19.

    See Condition E7-5 of Major Source Operating Permit No. 548512.

13. The maximum input capacity for Feed Cooler w/cyclone and scrubber control shall not exceed the amount as given in the approved confidential application dated October 3, 2005.

Compliance Method: A log of the process material input rate in a form that assures compliance with this condition must be maintained at the source location and made available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

See Condition E7-5 of Major Source Operating Permit No. 548512.

14. Particulate matter from Feed Cooler w/cyclone and scrubber control shall not exceed 3.2 pounds per hour.

Compliance Method: Compliance with the particulate emissions shall be assured by maintaining the parameters specified in the Manufacturing Process Parameter Table at Condition #19.

15. The maximum input capacity for Vacuum Filter Aspiration shall not exceed the amount as given in the approved confidential application dated October 3, 2005.

Compliance Method: A log of the process material input rate in a form that assures compliance with this condition must be maintained at the source location and made available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

16. Volatile Organic Compound emissions from Vacuum Filter Aspiration shall not exceed 9.5 tons/year.

Sulfur dioxide emissions from Vacuum Filter Aspiration shall not exceed 3.8 tons/year.

Compliance Method: Compliance with the VOC and SO2 emissions shall be assured by maintaining the parameters specified in the Manufacturing Process Parameter Table at Condition #19.

See Condition E7-5 of Major Source Operating Permit No. 548512.

17. The maximum input capacity from these sources shall not exceed the amount as given in the approved confidential application dated October 3, 2005.

a. Gluten Dryer with eight cyclones with wet scrubber/thermal oxidizer control (PES #9)
b. Germ Pre-Dryer w/ two cyclones with wet scrubber/thermal oxidizer control (PES #16)
c. Feed Dryer #1 w/ two cyclones with wet scrubber/thermal oxidizer control (PES #18)
d. Feed Dryer #2 w/ two cyclones with wet scrubber/thermal oxidizer control (PES #19)
e. Feed Dryer #3 w/ cyclone with wet scrubber/thermal oxidizer control (PES #94)
f. Feed Dryer #4 w/ cyclone with wet scrubber/thermal oxidizer control (PES #95)

Compliance Method: A log of the process material input rate in a form that assures compliance with this condition must be maintained at the source location and made available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

18. The fuel heat input rate for each emissions unit of this source shall not exceed:

a. 39,000,000 BTU per hour for the gluten dryer (PES #9)
b. 30,000,000 BTU per hour for the germ pre-dryer (PES #16)

c. 50,000,000 BTU per hour for the feed dryer #1 (PES #18)
d. 50,000,000 BTU per hour for the feed dryer #2 (PES #19)

Natural gas shall be used as fuel for this source.

The Technical Secretary may require the permittee to demonstrate compliance with these limits.

19. Emissions from the two coal boilers (PES #34 & 35), the gas/oil boiler (PES #36), feedhouse dryers (PES #9, #16, #18, #19, #94 & 95) shall not exceed the following amounts via the Boiler House Stack.

Pollutant	**Boiler House Stack**
Particulate Matter (TSP)	42.9 pounds/hour (188.1 tons/year)
Sulfur Dioxide (SO2)	1471 tons/year
Carbon Monoxide (CO)	213.8 tons/year
Nitrogen Oxides (NOx)	847.5 tons/year
Volatile Organic Compounds (VOC)	55.5 tons/year

Compliance Method: Compliance with PM, SO2 and VOC emissions shall be assured by maintaining the following parametric monitoring values.

Manufacturing Process Parameters

Description and PES #	Minimum Flow Rate (gallons per minute)	Average daily current to scrubber pump (amperes)	Minimum pH of scrubber liquid	Minimum RTO Temperature (Fahrenheit)
Gluten Dryer (PES #9)	300	6.2	5	1500
Germ Pre-Dryer (PES #16)	294	N/A	6	1500
Feed Dryer #1 (PES #18)	235	N/A	6	1500
Feed Dryer #2 (PES #19)	235	N/A	6	1500
Feed Dryer #3 (PES #94)	300	6.2	5	1500
Feed Dryer #4 (PES #95)	300	6.2	5	1500
Feed Cooler (PES #20)	100	N/A	N/A	N/A
Vacuum Filter Asp (PES #65)	143	2.2	6	N/A
Gluten Filter Asp (PES #5)	170	5.8	6	N/A

For example, the gluten dryer has a minimum wet scrubber liquid flow of 300 gallons per minute and a minimum pH of 5 for the scrubber liquid. A minimum liquid flow of 300 gallons per minute to the scrubber shall be assured by maintaining an average daily current of 6.2 amperes to the scrubber liquid pump and by conducting a daily visual inspection of each scrubber by operating personnel. The average daily electrical current in amperes shall be determined from the average current in amperes over the hours that the scrubber pump is in operation for that day. The purpose of the visual inspection shall be to verify normal flow of water within the scrubber. A daily record of the average current flow (amperes) and of a visual inspection of the scrubber to insure proper operation of the scrubber shall be maintained. Records shall be retained for a period of not less than five years.

For sources with no corresponding daily average current readings the permittee shall assure compliance by maintaining the minimum flow rate listed above and by conducting a daily visual inspection of each scrubber by operating personnel. The purpose of the visual inspection shall be to verify normal flow of water within the scrubber. A daily record of the flow rate and of a visual inspection of the scrubber to insure proper operation of the scrubber shall be maintained. Records shall be retained for a period of not less than five (5) years.

The pH level of the scrubber liquid shall be monitored and recorded once daily. This record shall be retained for a period of not less than five (5) years.

A continuous monitoring system shall be calibrated, maintained and operated on each thermal oxidizer for measuring operating temperature. For purposes of this condition continuous shall mean temperature measurement no less than once per minute. The output of this system shall be recorded as 3-hour averages. From the date of issuance of this permit, the Permittee shall operate the thermal oxidizers at or above the 3-hour average temperature of 1500 F.

20. The Maintenance Bypass for Regenerative Thermal Oxidizer #1 for Feedhouse Stack #2 associated with PES #'s 9, 94 and 95 shall operate no more than 408 hours per year.

Compliance Method: A log of the hours of operation of the Thermal Bypass for this source that assures compliance with this condition must be maintained at the source location and made available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

53-0081-06

Cracked Corn Conveying (PES #6), Feed Milling (PES #21) and Pellet Loadout (PES #52) controlled by a wet scrubber that exhausts through FHS #3 Stack

21. The maximum input capacity for this source shall not exceed the amount as given in the approved confidential application dated October 3, 2005.

Compliance Method: A log of the process material input rate in a form that assures compliance with this condition must be maintained at the source location and made available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

See Condition E5-1 of Major Source Operating Permit No. 548512.

22. Particulate matter from this source shall not exceed 2.3 pounds per hour.

Compliance Method: Compliance with the particulate matter emissions shall be assured by maintaining a minimum wet scrubber liquid flow of 300 gallons per minute. A minimum of 300 gallons per minute to the scrubber shall be assured by maintaining an average daily current of 8.0 amperes to the scrubber liquid pump and by conducting a daily visual inspection of the scrubber by operating personnel. The average daily electrical current in amperes shall be determined from the average current in amperes over the hours that the scrubber pump is in operation for that day. The purpose of the visual inspection shall be to verify normal flow of water within the scrubber. A daily record of the average current flow (amperes) and of a visual inspection of the scrubber to insure proper operation of the scrubber shall be maintained. Records shall be retained for a period of not less than five (5) years.

See Condition E5-3 of Major Source Operating Permit No. 548512.

53-0081-07

Germ Dryers (PES #7 & #8)
Second pass dryers each controlled by a high efficiency cyclone combined with a new common wet scrubber which exhausts through its own stack.

23. The maximum input capacity for this source shall not exceed the amount as given in the approved confidential application dated October 3, 2005.

Compliance Method: A log of the process material input rate in a form that assures compliance with this condition must be maintained at the source location and made available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

See Condition E6-1 of Major Source Operating Permit No. 548512.

24. Particulate matter from this source shall not exceed 1.7 pounds per hour.

Sulfur dioxide emissions from this source shall not exceed 6.5 tons/year.

Volatile Organic Compound emissions from this source shall not exceed 11 tons/year.

Compliance Method: The control device will be operated and maintained in accordance with manufacturer specifications or best management practices. Routine inspections shall be performed on all control devices. Appropriate maintenance records including inspections, and dates on which maintenance is performed shall be recorded in a suitable permanent form and kept available for inspection.

After start up (see Condition No. 7), the permittee shall compile 30 days of parameter readings (for example: scrubber flow, average current, pH readings) for the control device. The designated person(s) shall note any relevant control device conditions, problems, or concerns when recording the values. This data shall be submitted to the Division as a part of the Title V Operating Permit application required in Condition 3. The minimum parameter values for compliance assurance will be incorporated in the Title V Operating Permit Renewal.

See Condition E6-2 of Major Source Operating Permit No. 548512.

53-0081-10	Pellet Cooler #1 with cyclone control

25. The maximum input capacity for this source shall not exceed the amount as given in the approved confidential application dated October 3, 2005.

Compliance Method: A log of the process material input rate in a form that assures compliance with this condition must be maintained at the source location and made available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

26. Particulate matter from this source shall not exceed 1.7 pounds per hour.

Compliance Method: The control device will be operated and maintained in accordance with manufacturer specifications or best management practices. Routine inspections shall be performed on all control devices. Appropriate maintenance records including inspections, and dates on which maintenance is performed shall be recorded in a suitable permanent form and kept available for inspection.

Compliance with this requirement shall be assured by performing daily observations for the presence of visible emissions. If during the observation visible emissions are observed, the facility will initiate corrective action in accordance with the site-specific start-up, shutdown, and malfunction plan.

53-0081-11	Pellet Cooler #2 with cyclone control

27. The maximum input capacity for this source shall not exceed the amount as given in the approved confidential application dated October 3, 2005.

Compliance Method: A log of the process material input rate in a form that assures compliance with this condition must be maintained at the source location and made available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

28. Particulate matter from this source shall not exceed 1.7 pounds per hour.

Compliance Method: The control device will be operated and maintained in accordance with manufacturer specifications or best management practices. Routine inspections shall be performed on all control devices. Appropriate maintenance records including inspections, and dates on which maintenance is performed shall be recorded in a suitable permanent form and kept available for inspection.

Compliance with this requirement shall be assured by performing daily observations for the presence of visible emissions. If during the observation visible emissions are observed, the facility will initiate corrective action in accordance with the site-specific start-up, shutdown, and malfunction plan.

53-0081-12 Pellet Cooler #3 with cyclone control

29. The maximum input capacity for this source shall not exceed the amount as given in the approved confidential application dated October 3, 2005.

Compliance Method: A log of the process material input rate in a form that assures compliance with this condition must be maintained at the source location and made available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

30. Particulate matter from this source shall not exceed 1.7 pounds per hour.

Compliance Method: The control device will be operated and maintained in accordance with manufacturer specifications or best management practices. Routine inspections shall be performed on all control devices. Appropriate maintenance records including inspections, and dates on which maintenance is performed shall be recorded in a suitable permanent form and kept available for inspection.

Compliance with this requirement shall be assured by performing daily observations for the presence of visible emissions. If during the observation visible emissions are observed, the facility will initiate corrective action in accordance with the site-specific start-up, shutdown, and malfunction plan.

53-0081-13 Pellet Cooler #4 with cyclone control

31. The maximum input capacity for this source shall not exceed the amount as given in the approved confidential application dated October 3, 2005.

Compliance Method: A log of the process material input rate in a form that assures compliance with this condition must be maintained at the source location and made available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

32. Particulate matter from this source shall not exceed 1.7 pounds per hour.

Compliance Method: The control device will be operated and maintained in accordance with manufacturer specifications or best management practices. Routine inspections shall be performed on all control devices. Appropriate maintenance records including inspections, and dates on which maintenance is performed shall be recorded in a suitable permanent form and kept available for inspection.

Compliance with this requirement shall be assured by performing daily observations for the presence of visible emissions. If during the observation visible emissions are observed, the facility will initiate corrective action in accordance with the site-specific start-up, shutdown, and malfunction plan.

53-0081-14	Germ Dryer Collector with Baghouse or Scrubber Control

33. Particulate matter from this source shall not exceed 0.53 pounds per hour.

Compliance Method: The potential to emit particulate matter from this source (53-0081-14) is less than five tons per year. In accordance with TAPCD 1200-3-9-.04(5)(c)3. and by annual certification of compliance, the permittee shall be considered to meet the monitoring and related record keeping and reporting requirements of TAPCR 1200-3-9-.02(11)(e)1.(iii), and the compliance requirements of TAPCR 1200-3-9-.02(11)(e)3.(i). The permittee shall submit annually a compliance certification for particulate matter from source (53-0081-14).

See Condition E6-2 of Major Source Operating Permit No. 548512.

53-0081-17	Gluten Conveying and Gluten Meal Loadout

34. The maximum input capacity for this source shall not exceed the amount as given in the approved confidential application dated October 3, 2005.

Compliance Method: A log of the process material input rate in a form that assures compliance with this condition must be maintained at the source location and made available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

See Condition E8-1 of Major Source Operating Permit No. 548512.

35. Particulate matter from this source shall not exceed 2.56 pounds per hour.

Compliance Method: The control device will be operated and maintained in accordance with manufacturer specifications or best management practices. Routine inspections shall be performed on all control devices. Appropriate maintenance records including inspections, and dates on which maintenance is performed shall be recorded in a suitable permanent form and kept available for inspection.

Compliance with this requirement shall be assured by performing daily observations for the presence of visible emissions. If during the observation visible emissions are observed, the facility will initiate corrective action in accordance with the site-specific start-up, shutdown, and malfunction plan.

See Condition E8-2 of Major Source Operating Permit No. 548512.

36. Visible emissions from the feed loadout building shall not exceed 0 percent opacity as determined by EPA Method 9 in the current 40 CFR 60, Appendix A. (6 minute average)

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996.

See Condition E8-5 of Major Source Operating Permit No. 548512.

53-0081-64	Germ Dewatering

37. The maximum input capacity for this source shall not exceed the amount as given in the approved confidential application dated October 3, 2005.

Compliance Method: A log of the process material input rate in a form that assures compliance with this condition must be maintained at the source location and made available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

See Condition E12-1 of Major Source Operating Permit No. 548512.

38. Sulfur dioxide emitted from this source shall not exceed 3.5 tons per year.

Volatile Organic Compound emissions from this source shall not exceed 0.7 tons/year.

Compliance Method: The potential to emit volatile organic compound and sulfur dioxide from this source (53-0081-64) is less than five tons per year. In accordance with TAPCD 1200-3-9-.04(5)(c)3. and by annual certification of compliance, the permittee shall be considered to meet the monitoring and related record keeping and reporting requirements of TAPCR 1200-3-9-.02(11)(e)1.(iii), and the compliance requirements of TAPCR 1200-3-9-.02(11)(e)3.(i). The permittee shall submit annually a compliance certification for particulate matter from source (53-0081-64).

See Condition E12-2 of Major Source Operating Permit No. 548512.

ELEVATOR AREA

53-0081-01	Corn Unloading System w/Baghouse Control

39. The maximum input capacity for this source shall not exceed the amount as given in the approved confidential application dated October 3, 2005.

Compliance Method: A log of the process material input rate in a form that assures compliance with this condition must be maintained at the source location and made

available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

See Condition E14-1 of Major Source Operating Permit No. 548512.

40. Particulate matter from this source shall not exceed 1.73 pounds per hour and 7.6 tons per year.

Compliance Method: The control device will be operated and maintained in accordance with manufacturer specifications or best management practices. Routine inspections shall be performed on all control devices. Appropriate maintenance records including inspections, and dates on which maintenance is performed shall be recorded in a suitable permanent form and kept available for inspection.

Compliance with this requirement shall be assured by performing daily observations for the presence of visible emissions. If during the observation visible emissions are observed, the facility will initiate corrective action in accordance with the site-specific start-up, shutdown, and malfunction plan.

See Condition E14-2 of Major Source Operating Permit No. 548512.

53-0081-02	Elevator Dust System w/Baghouse Control

41. The maximum input capacity for this source shall not exceed the amount as given in the approved confidential application dated October 3, 2005.

Compliance Method: A log of the process material input rate in a form that assures compliance with this condition must be maintained at the source location and made available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

See Condition E15-1 of Major Source Operating Permit No. 548512.

42. Particulate matter from this source shall not exceed 1.18 pounds per hour and 5.2 tons per year.

Compliance Method: The control device will be operated and maintained in accordance with manufacturer specifications or best management practices. Routine inspections shall be performed on all control devices. Appropriate maintenance records including inspections, and dates on which maintenance is performed shall be recorded in a suitable permanent form and kept available for inspection.

Compliance with this requirement shall be assured by performing daily observations for the presence of visible emissions. If during the observation visible emissions are observed, the facility will initiate corrective action in accordance with the site-specific start-up, shutdown, and malfunction plan.

See Condition E15-2 of Major Source Operating Permit No. 548512.

ALCOHOL AREA

53-0081-28	CO2 and Propagator Scrubbers: CO2 Scrubber (PES 28A) and Propagator Scrubber in Series with Regenerative Thermal Oxidizer (PES 28B)

43. The maximum input capacity for this source shall not exceed 360,000 gallons of alcohol per day.

Compliance Method: A log of the process material input rate in a form that assures compliance with this condition must be maintained at the source location and made available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

See Condition E25-1 of Major Source Operating Permit No. 548512.

44. Volatile Organic Compounds (VOC) emitted from PES 28A and PES 28B shall not exceed 14.7 and 1.9 tons per year, respectively.

Sulfur dioxide emitted from this PES 28B shall not exceed 2.5 tons per year.

Compliance Method: **(PES 28A)** The control device will be operated and maintained in accordance with manufacturer specifications or best management practices. Routine inspections shall be performed on all control devices. Appropriate maintenance records including inspections, and dates on which maintenance is performed shall be recorded in a suitable permanent form and kept available for inspection.

After start up (see Condition No. 7), the permittee shall compile 30 days of parameter readings (for example: scrubber flow, average current, pH readings, and pressure drop) for the control device. The designated person(s) shall note any relevant control device conditions, problems, or concerns when recording the values. This data shall be submitted to the Division as a part of the Title V Operating Permit application required in Condition 3. The minimum parameter values for compliance assurance will be incorporated in the Title V Operating Permit Renewal.

Compliance Method: (PES 28B) The permittee shall assure compliance by maintaining a minimum scrubber flow rate of 19 gallons per minute for PES 28B, maintaining the average daily operating temperature of the regenerative thermal oxidizer in series with the propagators' scrubber at PES 28B at a minimum of 1400 °F and by conducting a daily visual inspection of each scrubber by operating personnel. The purpose of the visual inspection shall be to verify normal flow of water within the scrubbers. A daily record of the flow rates, the average daily operating temperature of the regenerative thermal oxidizer and a visual inspection of the scrubbers to insure proper operation of the scrubbers shall be maintained. Records shall be retained for a period of not less than five (5) years.

See Condition E25-2 of Major Source Operating Permit No. 548512.

53-0081-54 Two Denatured Alcohol Storage Tanks

45. The stated design storage capacity for each tank is 300,000 gallons. The annual throughput shall not exceed a total of 126,000,000 gallons of alcohol per year for this source.

Compliance Method: A log of the turnover rate for each tank must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

See Condition E26-1 of Major Source Operating Permit No. 548512.

53-0081-55	Alcohol Storage and Loadout, Aspirated to Scrubber

46. The annual throughput shall not exceed 126,000,000 gallons of alcohol per year for this source.

Compliance Method: A log of the turnover rate must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

See Condition E27-1 of Major Source Operating Permit No. 548512.

53-0081-59	One (1) Gasoline Storage Tank (30,000 Gallon Capacity)

47. The stated design storage capacity for this storage tank is 30,000 gallons, with a throughput of 6,570,000 gallons of gasoline per year. The Technical Secretary may require the company to demonstrate compliance with this rate.

Compliance Method: A log of the turnover rate must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

See Condition E28-1 of Major Source Operating Permit No. 548512.

53-0081-61	One (1) Fuel Additive Storage Tank (6,500 Gallon Capacity)

48. The stated design storage capacity for this storage tank is 6,500 gallons, with a throughput of 594,000 gallons of fuel additive per year. The Technical Secretary may require the company to demonstrate compliance with this rate.

Compliance Method: A log of the turnover rate must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

49. A determination has been made that this source does not produce any SO_2 or particulate matter emissions. Therefore, the allowable emissions for these pollutants are zero (above that contained in the ambient air), pursuant to Rule 1200-3-9-.01(4) of the Tennessee Air Pollution Control Regulations.

50. Volatile organic compounds (VOC) emitted from this source shall not exceed 1.9 tons per year.

Compliance Method: The potential to emit volatile organic compounds from this source (53-0081-61) is less than five tons per year. In accordance with TAPCD 1200-3-9-.04(5)(c)3. and by annual certification of compliance, the permittee shall be considered to meet the monitoring and related record keeping and reporting requirements of TAPCR 1200-3-9-.02(11)(e)1.(iii), and the compliance requirements of

TAPCR 1200-3-9-.02(11)(e)3.(i). The permittee shall submit annually a compliance certification for particulate matter from source (53-0081-61).

53-0081-97	Storage Tank: for denatured alcohol 1,000,000 gallons capacity; with external fixed roof and internal floating roof. **NSPS (State)**

51. Tank storage capacity shall not exceed 1,000,000 gallons.

52. Volatile Organic Compounds (VOC) emitted from this source (tank) shall not exceed 0.4 tons per year.

Compliance Method: The potential to emit volatile organic compounds from this source (53-0081-97) is less than five tons per year. In accordance with TAPCD 1200-3-9-.04(5)(c)3. and by annual certification of compliance, the permittee shall be considered to meet the monitoring and related record keeping and reporting requirements of TAPCR 1200-3-9-.02(11)(e)1.(iii), and the compliance requirements of TAPCR 1200-3-9-.02(11)(e)3.(i). The permittee shall submit annually a compliance certification for particulate matter from source (53-0081-59).

53. The source shall be subject to the Standard for Volatile Organic Compounds (VOC) requirements as per Tennessee Air Pollution Control Regulations for Volatile Organic Liquid Storage Vessels in Rule 1200-3-16-.61(3)(a)1.

54. The source shall be subject to the requirements of the Test Methods and Procedures as per Tennessee Air Pollution Control Regulations for Volatile Organic Liquid Storage Vessels in Rule 1200-3-16-.61(4)(a)1.

55. The source shall be subject to the Reporting and Record keeping requirements of the Tennessee Air Pollution Control Regulations for Volatile Organic Liquid Storage Vessels in Rule 1200-3-16-.61(6)(a).

53-0081-98	Storage Tank: for denatured alcohol 1,000,000 gallons capacity; with external fixed roof and internal floating roof. **NSPS (State)**

56. Volatile Organic Compounds (VOC) emitted from this source (tank) shall not exceed 0.4 tons per year.

Compliance Method: The potential to emit volatile organic compounds from this source (53-0081-98) is less than five tons per year. In accordance with TAPCD 1200-3-9-.04(5)(c)3. and by annual certification of compliance, the permittee shall be considered to meet the monitoring and related record keeping and reporting requirements of TAPCR 1200-3-9-.02(11)(e)1.(iii), and the compliance requirements of TAPCR 1200-3-9-.02(11)(e)3.(i). The permittee shall submit annually a compliance certification for particulate matter from source (53-0081-98).

See Condition E29-2 of Major Source Operating Permit No. 548512.

53-0081-99	Alcohol Barge Loadout Facility Wet Scrubber Control

57. The annual throughput shall not exceed 126 million gallons of alcohol per year for this source.

Compliance Method: A log of the alcohol turnover/loadout rate must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

See Condition E30-1 of Major Source Operating Permit No. 548512.

UTILITIES AREA

53-0081-34	Boilers #1 and #2, Coal Fired with Baghouse Control Boiler #3, Natural Gas, No.2 Fuel or Glycerol Fermentation Byproduct Fired with Low NOx Burner

58. The steam generated by boiler #1 and boiler #2 shall be limited to a total of 400,000 pounds steam per hour. In addition, the sulfur dioxide emissions from boiler #1 and boiler #2 shall not exceed 1.2 pounds per million BTU of heat input to each boiler. The averaging time period for this emission limitation shall be three hours.

Compliance Method: Compliance with the twenty-four hour emission standard (pounds per hour) shall be determined by use of steam production rates recorded on a one hour basis for each coal boiler. The twenty-four hour steam production average shall be calculated by averaging eight three-hour data averages and must be less than 400,000 pounds of steam per hour.

Consistent with the provisions of Rule 1200-3-20-.06 of the Tennessee Air Pollution Control Regulations, no notice of violation shall be automatically issued unless the specified de minimus level of one (1) 3-hour or 24-hour period per year of sulfur dioxide emissions in excess of the applicable sulfur dioxide emissions standard, as measured by the continuous in-stack sulfur dioxide emissions monitoring system, is exceeded. This exemption from automatic issuance of a notice of violation is applicable provided that good operational and maintenance practices are utilized for the fuel burning equipment, and the 90 percent operational availability of the sulfur dioxide monitoring system is maintained.

The data averaging time period for the sulfur dioxide monitoring systems shall be three hour periods for the reporting of time periods of excess emissions pursuant to the requirements of 40 CFR 60.45(g)(2)(i).

The spans of the sulfur dioxide monitors installed on Boilers #1 and #2 shall be 1000 ppm of the sulfur dioxide in accordance with the provisions of the letter from Mr. James T. Wilburn of EPA to Harold E. Hodges dated October 31, 1984.

See Condition E34-5 of Major Source Operating Permit No. 548512.

59. Emissions from the two coal boilers (PES #34 & 35), the gas/oil boiler (PES #36), feedhouse dryers (PES #9, #16, #18, #19, #94 & 95) shall not exceed the following amounts via the Boiler House Stack.

Pollutant	**Boiler House Stack**
Particulate Matter (TSP)	42.9 pounds/hour (188.1 tons/year)
Sulfur Dioxide (SO2)	1471 tons/year
Carbon Monoxide (CO)	213.8 tons/year
Nitrogen Oxides (NOx)	847.5 tons/year
Volatile Organic Compounds (VOC)	55.5 tons/year

Compliance Method: Compliance with the emission limits for nitrogen oxides, carbon monoxide, and volatile organic compounds are based upon calculations using **EPA, AP-42** emission factors for coal and other factors.

AP-42 emission factors for combustion of coal:

Pollutant	Emission Factor
CO	5 pounds per ton

Pollutant	Emission Factor
VOC	0.05 pounds per ton

Pollutant	Emission Factor
NO_X	11 pounds per ton

See Condition E34-6 of Major Source Operating Permit No. 548512.

60. Emissions from boiler #1 and boiler #2 shall not exceed the following:

Pollutant	**Emission Rate** (pounds per million BTU)
Particulate Matter (TSP)	0.07*
Nitrogen Oxides (NOx)	0.35
Carbon Monoxide (CO)	0.094
Volatile Organic Compounds (VOC)	0.0125

per boiler by 40 CFR 63, Subpart DDDDD

Compliance Method: Compliance with the emission limits for nitrogen oxides, carbon monoxide, and volatile organic compounds are based upon calculations using **EPA, AP-42** emission factors for coal.

AP-42 emission factors for combustion of coal:

Pollutant	Emission Factor
CO	5 pounds per ton

Pollutant	Emission Factor
VOC	0.05 pounds per ton

Pollutant	Emission Factor
NO_X	11 pounds per ton

See Condition E34-7 of Major Source Operating Permit No. 548512.

61. Particulate matter emitted from Boiler #3 shall not exceed 0.0075 pounds per million BTU when burning natural gas or 0.014 pounds per million BTU when burning No. 2 fuel oil or glycerol fermentation byproduct.

Compliance Method: Compliance with this emission limitation is based on calculations using EPA AP-42 emission factor for natural gas and No.2 fuel oil (7.6 pounds per million cubic feet natural gas and 2 pounds per 1000 gallons). A log of the monthly fuel usage of No. 2 fuel oil or the glycerol fermentation byproduct must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

See Condition E34-9 of Major Source Operating Permit No. 548512.

62. Sulfur dioxide emitted from Boiler #3 shall not exceed 1.01 pounds per million BTU.

Compliance Method: Compliance with this emission limitation is based on calculations using EPA AP-42 emission factor for No.2 fuel oil (142S pounds per 1000 gallons of No. 2 fuel oil; where S= weight % sulfur in oil). A log of monthly fuel usage of No. 2 fuel oil and the glycerol fermentation byproduct must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

See Condition E34-10 of Major Source Operating Permit No. 548512.

63. Carbon monoxide emitted from Boiler #3 shall not exceed 0.082 pounds per million BTU when burning natural gas or 0.033 pounds per million BTU when burning No. 2 fuel oil or glycerol fermentation byproduct.

Compliance Method: Compliance with this emission limitation is based on calculations using EPA AP-42 emission factor for natural gas and No.2 fuel oil (84 pounds per million cubic feet natural gas and 5 pounds per 1000 gallons of No. 2 fuel oil). A log of monthly fuel usage of No. 2 fuel oil and the glycerol fermentation byproduct must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

See Condition E34-11 of Major Source Operating Permit No. 548512.

64. Nitrogen Oxides emitted from Boiler #3 shall not exceed 0.04 pounds per million BTU when burning natural gas, 0.08 pounds per million BTU when burning glycerol fermentation byproduct, or 0.17 pounds per million BTU when burning No. 2 fuel oil.

Compliance Method: Compliance with this emission limitation is based on the use of a low NOx burner and calculations using EPA AP-42 emission factor for No.2 fuel oil (24 pounds per 1000 gallons of No. 2 fuel oil). A log of monthly fuel usage of No. 2 fuel oil and the glycerol fermentation byproduct must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

See Condition E34-12 of Major Source Operating Permit No. 548512.

65. Volatile organic compounds emitted from Boiler #3 shall not exceed 0.0054 pounds per million BTU.

Compliance Method: Compliance with this emission limitation is based on calculations using EPA AP-42 emission factor for natural gas and No.2 fuel oil (5.5 pounds per million cubic feet natural gas and 0.2 pounds per 1000 gallons of No. 2 fuel oil. A log of monthly fuel usage of No. 2 fuel oil and the glycerol fermentation byproduct must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

See Condition E34-13 of Major Source Operating Permit No. 548512.

66. No later than three hundred sixty five (365) days after initial start-up (See Condition 3), the owner or operator shall furnish the Technical Secretary a written report of the results of a source emissions test showing compliance with Condition 59 for Volatile Organic Compounds and Sulfur Dioxide emitted from Source No. 53-0081-34, Boiler House Stack. The source emissions test shall be conducted and data reduced in accordance with methods and procedures approved by the Technical Secretary.

67. At least thirty (30) days prior to conducting the source emissions test, the Technical Secretary shall be given notice of the test in order to afford him the opportunity to have an observer present.

53-0081-15	Anaerobic System w/Flare

68. Sulfur dioxide emissions from this source shall not exceed 16 tons/year.

Compliance Method: Routine maintenance, as required to maintain specified emission limits, shall be performed on the Flare. Maintenance records shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than two years.

The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996.

(end of conditions)

The permit application gives the location of this source as 35°44’04” Latitude and 84°19’20” Longitude.